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Paulus Maria Smeets

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YOUNG & THOMPSON
209 Madison Street
Suite 500
Alexandria, VA 22314

EXAMINER

RASHID, MAHBUBUR

ART UNIT

PAPER NUMBER

3657

NOTIFICATION DATE

DELIVERY MODE

12/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

DETAILED ACTION

Response to Amendment

Claims 22-23 are newly added.

Claim Objections

Claim 4 is objected to because of the following informalities:

In line 4, "a transverse element" is not clear if the applicant is referring it as the same transverse element disclosed in claim 1 or a different transverse element.

Appropriate correction is required.

Claim 17 is objected to because of the following informalities:

In line 4, "an elastically deformable spacing means" is not clear if the applicant is referring it as the same intermediate body disclosed in claim 1 or something different that is not shown in any of the drawings. Appropriate correction is required.

Claim 22 is objected to because of the following informalities:

In line 12, "apposite" should be –opposite-. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4, 5, 7-14 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. R. Perry (US 2,322,466) in view of Hattori (US 4,552,549) and further in view of Bouteiller et al. (US 4,773,896) and/or David Bernard (WO 8301665 A1).

Regarding **claims 1 and 21-22**, Perry discloses a drive belt (figs. 1-5) provided with a tensile means (10), in which the tensile means is incorporated in the belt, which belt is provided with transverse elements (11), each disposed at radial sides of the tensile mean (10), the transverse elements being provided with a slotted opening (figs. 2, 4 and 6), with an intermediate body (26) deposited to at least one radial side of which so as to be able to be compressed between the tensile means (10) and the transverse elements (11) to the tensile means and vice versa,

wherein the intermediate body (26) has a connection with a radial face of the tensile means and in which the slotted openings of the transverse elements (11) fit with a cross section of the tensile means (10).

Perry discloses all claimed elements including an intermediate body but fails to disclose an elastically deformable material intermediate body as claimed, but each of Bouteiller and Bernard discloses similar belt (see fig. 7 of Bouteiller and fig. 1 of Bernard) each comprising an intermediate body of elastically deformable material (see (3) of Bernard and the elastic body member on the bottom radial side of (C) and between the transverse elements (10) of Bouteiller) on the tensile means. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the belt of Perry with such intermediate body of elastically deformable material as taught by either Bouteiller or Bernard in order to reinforce the transverse elements and also making the belt strong and durable and thus increasing the life to the belt.

The modified belt of Perry discloses the claimed invention except for the specific values of the thickness of the tensile means and the intermediate body. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide such thickness of the tensile means and the intermediate body of the belt of Perry, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272,205 USPQ 215 (CCPA 1980).

The modified belt of Perry discloses all claimed elements as set forth above but fails to explicitly disclose the tensile means being one of a unidirectional and a metal sheet material as claimed. However, Hattori discloses a similar type drive belt (figs. 1-4) including a metal sheet material tensile means (1) (see also col. 2, lines 54-58). It would have been obvious to one of ordinary skill in the art at the time the invention was

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made to make the tensile means of Perry of a metal or a steel material as taught by Hattori, because metal or steel material is stronger and more durable than rubber material and thus increasing the life of the belt.

The modified belt of Perry discloses the intermediate body mounted on the tensile means with pins but fails to disclose the use of adhesive to attach the intermediate body to the tensile means. The examiner takes official notice that adhesive are well known methods of attachment for rubber and elastomer elements. The choice of attachment method is a an engineering design choice based on factors such as ease of assembly, durability, availability of materials or equipment and one of ordinary skill in the art would choose any appropriate method of attachment based on these and other factors.

Regarding **claim 4**, Perry fails to disclose an elastically deformable material intermediate body as claimed, but Bouteiller and Bernard disclose similar belts (see fig. 7 of Bouteiller and fig. 1 of Bernard) each comprising an intermediate body of elastically deformable material (see (3) of Bernard and the elastic body member on the bottom radial side of (C) and between the transverse elements (10) of Bouteiller) on the tensile means. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the belt of Perry with such intermediate body of elastically deformable material as taught by either Bouteiller or Bernard in order to reinforce the transverse elements and also making the belt strong and durable and thus increasing the life to the belt.

Regarding **claims 5, 7 and 17-20**, the modified belt of Perry discloses the claimed invention except for the specific values of the thickness of the tensile means and the intermediate body. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide such thickness of the tensile means and the intermediate body of the belt of Perry, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272,205 USPQ 215 (CCPA 1980).

Regarding **claim 8**, the modified belt of Perry discloses the claimed invention except for the specific values of the thickness and elasticity modulus of the tensile means and the intermediate body. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide such thickness and elasticity modulus of the tensile means and the intermediate body of the belt of Perry, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272,205 USPQ 215 (CCPA 1980).

Re-claim 9, see a mutual distance of the transverse elements (11).

Regarding **claims 10, 12 and 14**, the modified belt of Perry discloses the claimed invention except for the specific values of the maximum height of the tensile means and the intermediate body. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide such height of the tensile means and the intermediate body of the belt of Perry, since it has been held that discovering an

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optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F. 2d 272,205 USPQ 215 (CCPA 1980).

Re-claim 11, see the intermediate body is provided over at least a substantial part of the width of the tensile means.

Regarding **claim 13**, the modified belt of Perry discloses the intermediate body mounted on the tensile means with pins but fails to disclose the use of adhesive to attach the intermediate body to the tensile means. The examiner takes official notice that adhesive are well known methods of attachment for rubber and elastomer elements. The choice of attachment method is a an engineering design choice based on factors such as ease of assembly, durability, availability of materials or equipment and one of ordinary skill in the art would choose any appropriate method of attachment based on these and other factors.

Re-claim 16, see the tensile means (10) is composed of a single part.

Re-claim 23, the modified belt of Perry does not disclose a mid section of the intermediate body/the elastically deformable element in between two adjacent transverse elements having a height above the relevant radial surface of the strip which is greater than the height of the elastically deformable element near the transverse element movable against the elastically deformable element. However, Bernard discloses flexible material (3) in between two adjacent transverse elements (4) having a height above the relevant radial surface of the strip which is greater than the height of the elastically deformable element near the transverse element movable against the elastically deformable element as claimed. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to provide such arrangement and height of the elastically deformable element as taught Bernard in the belt system of Perry will transmit a great effort, with continuous variation speed in a compactness and thus making the belt more efficient.

Response to Arguments

Applicant's arguments filed have been fully considered but they are not persuasive.

Regarding the force transferring, the Examiner notes that the functional recitation that "for transferring the force" has not been given patentable weight because it is narrative in form and is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. Furthermore, it not clear how the tensile means of the present application is capable of transferring the force as claimed when the tensile means does not even contact the drive wheels. However, the belt of Perry is transfers forces through the tensile means, the pins and the transverse elements. It is thus, the rejection is proper and valid.

Regarding the reference of Hattori, the Examiner notes that Perry is already discloses a single strip made of a flexible material (10) and Hattori is only teaching that the such strip can be made of flexible metal since the metal is more durable and stronger than rubber like material.

Regarding the remark on page 15, the applicant discloses the method of manufacturing of the belts of applied references and compared with the belt of the

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present application. However, the Examiner notes that such method of manufacturing of the belt is not disclosed in any of the claims and the combination of the applied references satisfied all the limitations as claimed. It is thus, the rejection is proper and valid.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

/M. R./
Examiner, Art Unit 3657